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ARACResults from Phase IIoftheEuropean Tracer Experiment

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SUMMARY

This paper presents the results of calculations by the Atmospheric Release Advisory Capability (ARAC) during Phase II of the European Tracer Experiment (ETEX). In Phase I of ETEX, participants generated predictions in real time of the motion and concentration of inert tracer gases released from a site in western France. Each participant based their predictions on the meteorological data they had available. Thus the results of Phase I compared the performance of complete response systems, not the dispersion models used in these systems.

In Phase II, the input data variability was removed by requiring all participants to recalculate predictions based on the same meteorological data, which was generated and supplied by the European Centre for Medium-Range Weather Forecasts (ECMWF). The goal of this phase was to allow more direct comparisons between the performance of the dispersion models. In many cases, the ECMWF data provide higher resolution than the original source of data, and so improved results would be expected. The ARAC calculation for the two phases will be compared in this paper.

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